

# **EXHIBIT F**

## **PART 4**

1 pieces in the unitized dye, and you put it in the  
2 press. And there won't be a pinch point that an  
3 operator would be exposed to. But for many other  
4 operations the dyes manufacture or produce a pinch  
5 point.

6 BY MR. HARTMAN:

7 Q. On the fourth paragraph down the page you  
8 indicate, and it is in bold, a press brake by  
9 itself must be considered an incomplete machine and  
10 only one component in a production system.

11 A. That's correct.

12 Q. Is that your testimony today?

13 A. That's a quote from the National Safety  
14 Council and I believe that's true.

15 Q. So a press brake is part of a system by  
16 which parts are ultimately molded or shaped?

17 A. Or other things, yes.

18 Q. Next, the last sentence in that paragraph  
19 says, likewise training and supervision of  
20 equipment operators was the responsibility of Cory;  
21 am I correct?

22 A. Yes.

23 Q. Does a press brake manufacturer expect  
24 that the employer will undertake training and

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1 supervision of the use of its equipment?

2 MR. ROBINSON: Object to the form of the  
3 question.

4 THE WITNESS: I believe it is reasonable to  
5 expect that, for a manufacturer of a product like  
6 this to expect that the employer will provide  
7 training, supervision for his operators of this  
8 kind of machine, yes.

9 BY MR. HARTMAN:

10 Q. Do you expect that training and  
11 supervision to be followed by the operators once  
12 the employer gives it to them?

13 A. Yes, with the proviso if the training or  
14 supervision is in some way obviously compromising  
15 their safety or well-being, putting them at some  
16 risk that they can reasonably perceive, then  
17 I think the employee -- in fact if you go and look  
18 at the OSHA criteria, they say employees have a  
19 responsibility for their own safety.

20 So if you are an employee and your  
21 employer tells you to take a pencil and stick it in  
22 your eye, even though your employer tells you to do  
23 that, you shouldn't do it. You have a certain  
24 responsibility for your own safety per OSHA and

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1 I think per just common sense that you should have  
2 a certain responsibility for your own safety.

3 Q. At the time of the manufacture and sale of  
4 the press brake involved in this accident, was the  
5 2001 version of OSHA in existence?

6 MR. ROBINSON: What? I am sorry.

7 BY MR. HARTMAN:

8 Q. The 2001 version of the OSHA requirements  
9 as it relates to press brake safety in existence?

10 A. No.

11 Q. Would you expect a manufacturer of a 1978  
12 machine to follow the 2001 OSHA regulation as it  
13 relates to press brake safety?

14 A. No.

15 OSHA didn't come into existence with rules  
16 and regulations until very early '70s and the ANSI  
17 standard with regards to press brakes were in the  
18 early '70s also. That would be the time that  
19 people involved in this kind of equipment would be  
20 embracing and incorporating those standards if they  
21 hadn't already done it by just the tradition in the  
22 country.

23 Q. In your experience are you familiar with  
24 Heim's manufacture and sale of press brakes?

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1 A. I don't understand your question.

2 Q. You have been out in the work force. Have  
3 you run across Heim press brakes?

4 A. I probably have. I can't say specifically  
5 this press at that location but I wouldn't be  
6 surprised that I came -- that I was in the presence  
7 of a Heim press brake.

8 Q. Do you have any specific recollection  
9 today as to whether or not you were in the presence  
10 of a Heim press brake?

11 A. I don't know exactly.

12 Let me turn my phone off. Sorry.

13 I did a lot of inspections when I was with  
14 the EPA, with Ford Motor Company, when I was with  
15 the Clark Equipment Company, the Euclid division  
16 and we had our own manufacturing facilities and  
17 outside vendors who manufactured things and  
18 I visited their plants. And they used all kinds of  
19 machine tools including press brakes.

20 But I can't tell you with exact certainty  
21 that it was a certain kind of Heim press brake in  
22 use at a certain plant. I don't have that specific  
23 recollection. I wouldn't be surprised if they were  
24 Heim but I don't know specifically.

1 Q. So you can't identify whether or not you  
2 have ever seen a Heim press brake in use?

3 A. I don't remember if I have or haven't.

4 Q. Do you know whether or not -- can you  
5 identify any manufacturers of press brakes that you  
6 were exposed to in the period of say 1975 to 1985?

7 A. It seems to me that there were -- Bliss  
8 made some that I remember being around. When I was  
9 at the John Deere plant -- I remember they used  
10 press brakes at the John Deere plant and I probably  
11 somewhere in my file I have notes as to the brand.  
12 I don't remember. It seems to me it may have been  
13 either Cincinnati or Cincinnati Millicron.  
14 I remember seeing those presses in use at I think a  
15 Ford supplier, both presses and press brakes.  
16 Those are the ones that pop into my mind.

17 Q. From the period of 1985 to the present, do  
18 you recall in your experience being exposed to any  
19 Heim press brakes?

20 A. Not specifically, no.

21 Q. Okay.

22 A. I may have but I don't recollect.

23 Q. Can you identify any brand names of press  
24 brakes you have seen in the period from 1985 to the

1 present while out in the field?

2 A. I don't remember the names. If I looked  
3 at the list of presses on that sheet, I might be  
4 able to remember. There was like an Asian company  
5 like Wysong or something like that I remember  
6 seeing. There was a plant in Detroit that used  
7 press brakes but I don't remember the name right  
8 offhand.

9 Q. Have you ever testified in cases other  
10 than this one where there has been an analysis of a  
11 foot control in use with either a press brake or a  
12 mechanical power press?

13 A. I know I testified in a case with foot  
14 control on saws.

15 And I know I testified in a case on a  
16 press or mechanical press, press brake or  
17 mechanical press where the primary issue were  
18 pullback devices on people's hand. And I think  
19 that was actuated by a foot control.

20 And I think I had a case where a light  
21 curtain had failed, and I believe that press,  
22 I think, was a mechanical press. And I believe  
23 that was also operated with a foot control.

24 Q. Were people injured in that case where the

1 light curtain failed?

2 A. Yes.

3 Q. Were people injured in the pullback device  
4 case?

5 A. Uh-huh.

6 Q. Were you -- by the way, what percentage do  
7 you -- are you retained by defendants and what  
8 percentage are you retained by plaintiffs in the  
9 cases that you have been asked to evaluate?

10 A. I don't have a log of every case I have  
11 been retained in and whether it is plaintiff or  
12 defense. So the best I can do is kind of assume  
13 that what I have testified in is maybe  
14 representative of the bigger pool of cases that  
15 I have been retained in.

16 And if you look at a longer time window,  
17 maybe like 10 years, it is probably about 60/40  
18 defense. And if you look at a shorter time window,  
19 probably like the last three or four years, it is  
20 probably a 40/60 defense. But on an annual basis  
21 if I testify either at trial or at deposition on a  
22 new case, it is probably about 12 times a year, a  
23 combination of trials and depositions.

24 So if one or two cases switches from

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1 defense to plaintiff, you get that kind of swing.  
2 So it is probably, you know, it oscillates around a  
3 60/40, 40/60 split.

4 Q. And maybe I limited myself but when  
5 I asked you about cases that you testified to or  
6 with regard to foot controls and press brakes or  
7 foot controls and punch presses or mechanical power  
8 presses, as you call it, I am also talking about  
9 cases that you have authored reports.

10 A. As I said, every time someone retains me,  
11 I, first of all, don't always know that a lawsuit  
12 has been filed or if it is going to be filed. And  
13 I don't keep track of cases just because I wrote a  
14 report. There is no reason for me to keep track of  
15 how many plaintiff, how many defense.

16 I do keep track of cases where I have  
17 testified in and every six, seven, five months,  
18 I go and update that list. And if you look at  
19 that, as I said over maybe from my recollection,  
20 because it is usually like a four- or five-year  
21 moving time window, the longer period is probably a  
22 little more defense work. And maybe if you only  
23 looked at the last three years, it is probably a  
24 little more plaintiff.

1 Q. My question, sir, was not as a follow-up  
2 to the division of plaintiffs and defendants that  
3 you work with. I am talking about cases that you  
4 were involved in. I am asking you just basically  
5 numerically were there cases you were involved in  
6 where you evaluated foot controls in conjunction  
7 with press brakes or mechanical power presses that  
8 you authored reports that you haven't told me about  
9 today?

10 A. There could have been. Nothing pops into  
11 my mind as I sit here.

12 Q. On page 9 you indicate that ANSI as the  
13 publishers --

14 A. What paragraph are we on?

15 Q. First paragraph.

16 A. Okay. The first paragraph on my page 9  
17 starts out OSHA.

18 Q. I am taking you over to the portion where  
19 it talks about ANSI, though, as the publishers of  
20 nationally-recognized consensus standards.

21 A. Okay.

22 Q. Is it your statement today that ANSI is  
23 the publisher of nationally-recognized consensus  
24 standards?

1           A.    Many of the standards that ANSI publishes  
2           are recognized national consensus standards and in  
3           particular OSHA for this kind of equipment looks to  
4           the ANSI B-11.3 standard as a recognized consensus  
5           standard.

6           Q.    Do you recognize ANSI as a publisher of  
7           nationally-recognized consensus standards as it  
8           relates to power press brakes?

9           A.    Yes.

10          Q.    What does consensus standard mean to you?

11          A.    A consensus standard means to me that the  
12          authors, the entities that produce the standard had  
13          a broad representation. They followed a  
14          well-documented procedural methodology to create  
15          the standard. They had a balloting on it where it  
16          was reviewed. People had an opportunity to comment  
17          on it, to criticize it, to request additional  
18          changes, request it be eliminated, expanded,  
19          contained other information, that it is in many  
20          ways compared to other collateral documents and  
21          standards that may be used for part of the basis  
22          for that standard. And then on a fairly regular  
23          basis it is reviewed and updated and kept current,  
24          those kinds of things.

1 Q. Does the ANSI standard as it relates to  
2 foot controls --

3 A. Wait, wait, there is no ANSI standard for  
4 foot controls that I am referring to.

5 Q. Okay. There is not an ANSI standard as it  
6 relates to foot controls in conjunction with power  
7 press brakes?

8 MR. ROBINSON: I will object to the form of the  
9 question.

10 THE WITNESS: There is an ANSI standard for  
11 press brakes and in that ANSI standard there are  
12 references to different kinds of foot control, foot  
13 operated devices and that's what I am referring to  
14 here.

15 BY MR. HARTMAN:

16 Q. Okay. So the ANSI standard for press  
17 brakes that references foot controls, is it meant  
18 to be exhaustive as to the types of foot controls  
19 that ANSI recognizes as meeting the standard for  
20 use with press brakes?

21 MR. ROBINSON: Object to the form of the  
22 question.

23 THE WITNESS: You know, I don't know that there  
24 is anything that's exhaustive. I mean if you

1 looked at the bible, you probably could write  
2 another paragraph or two if you wanted to make it  
3 more exhaustive.

4 It defines what -- I believe it defines what is  
5 reasonable and gives examples and uses terminology  
6 that's consistent and available to the public and  
7 meaningful for the public and there are  
8 opportunities to ask for interpretations. But it  
9 is not exhaustive in terms of it turns over every  
10 rock and gives you every variation and every  
11 combination.

12 Most of these standards are -- try to be  
13 performance standards where they give you  
14 performance criteria and then you as the designer  
15 try to meet that performance.

16 So it will say, for example, a standard might  
17 say it will restrain an object of five pounds going  
18 five miles an hour. It is up to you to figure out  
19 how to do that. That's a performance standard.  
20 And a lot of the criteria in the ANSI standards try  
21 to embrace performance characteristics.

22 So as far as foot controls, they talk about  
23 them having control reliability. They don't tell  
24 you how to do that. They say but it should be

1 reliable at a certain level and it is up to you as  
2 a designer to figure that out.

3 In the case of safeguarding foot controls, they  
4 say they should have side shields and they should  
5 have a top shield so things can't fall on them, so  
6 people can't come by and step on the top of them.  
7 And it is up to you whether you want to use  
8 cardboard to do that, glass, platinum or steel.  
9 You can use whatever you want but they give you  
10 this performance criteria.

11 Nowhere in the standard do they give you  
12 performance criteria that says a foot control  
13 should be designed in such a way that someone can't  
14 accidentally slip their foot into it for it to  
15 operate.

16 BY MR. HARTMAN:

17 Q. But if you made such a foot pedal it would  
18 be in compliance with the standard, would you  
19 agree?

20 MR. ROBINSON: I will object to the form of the  
21 question.

22 THE WITNESS: Not necessarily. It depends on  
23 how you make it. It depends if it has these other  
24 characteristics. You could make it with a -- and

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1 Linemaster does make a foot control with a door on  
2 the front. But even that control we have talked  
3 about in other depositions and in my deposition,  
4 the faults and failings of that, the problems with  
5 that and Ralph Barnett has testified and I believe  
6 he has testified, I know it is in his publications,  
7 he has talked about the fact that even those with  
8 doors on the front, that if you hit them hard from  
9 the front, the door opens up and your foot goes  
10 right inside. So as far as preventing inadvertent  
11 actuation, even that doesn't solve the problem.

12 So it has its ups and downs and if you follow  
13 the protocol, the criteria, I don't believe you  
14 would come to the conclusion you would put the door  
15 on this foot control for this application.

16 BY MR. HARTMAN:

17 Q. Have you ever studied the phenomenon that  
18 you just discussed where if you hit the gate hard  
19 enough, it would allow access to the foot control  
20 and allow activation of the foot control?

21 A. Well, you know, when you say study, as  
22 being a professor at a university, that has a  
23 special meaning to me. I haven't performed some  
24 kind of statistical study of that but I have one of

1     these kinds of Heim -- I mean Linemaster foot  
2     controls with the door on the front.

3             And as you are aware of, it has a curl on  
4     the front and if you hit -- I know I have done this  
5     myself -- if you hit that with your foot, it  
6     depends a little bit on the kind of shoe and how it  
7     angles, approach and everything, you can get the  
8     door to move open.

9             It is designed for that to happen because  
10    if it was totally slammed shut, you would have to  
11    reach down with your hand and open it. So it is  
12    intended that the tip of your foot, a part of your  
13    foot can hit it and cause it to open. And I have  
14    demonstrated for myself the phenomenon that he  
15    talks about and has written about in one of his  
16    publications, that you can bounce the door open.

17        Q.   Other than demonstrating for yourself that  
18    phenomenon that you discussed, have you seen it in  
19    any other context?

20        MR. ROBINSON:  Objection to the form.  Also it  
21    has been answered previously with reference to the  
22    publications.

23        THE WITNESS:  The only place I can think of is  
24    in Ralph Barnett's, one of his safety briefs

1 clearly states that that is a problem with that  
2 configuration.

3 BY MR. HARTMAN:

4 Q. On page 11 of your report --

5 A. Yes.

6 Q. -- the citation at the end where -- excuse  
7 me -- the last paragraph it says, a review of the  
8 literature for press brake shows that it is obvious  
9 that the custom and practice during these years was  
10 not to promote or require the use of front covered  
11 foot controls for safety and press brakes. Indeed  
12 in a publication by the plaintiff's expert, it is  
13 reported that the typical foot switches found in  
14 industry are the open front control -- open front  
15 foot control, not the front covered foot control he  
16 now demands in the case. Open-sided and  
17 side-shielded foot switches, lifts are typical of  
18 the control candidates found in industry.

19 Then you cite Professor Barnett's article,  
20 Reciprocating Versus Pivoting; am I correct?

21 A. Yes.

22 Q. Is that your testimony today?

23 A. Yes.

24 Q. And you hold true to that?

1 A. I believe so, yes.

2 Q. Are you relying on Professor Barnett's  
3 article to formulate your opinions that open-sided  
4 and side-shielded foot switches are typical of the  
5 control candidates found in industry?

6 A. No, no, I am using that -- I agree with  
7 him that that is true. And I cite this document  
8 where he talks in general about foot controls and  
9 in this part of his publication he is talking about  
10 generally in industry that you see that  
11 configuration and I agree with that.

12 And I have been to plants where they have  
13 had foot controls. I have -- my employer has had  
14 plants where they have had foot controls. I have  
15 looked at the literature, the codes, the standards.  
16 That appears to be the custom and practice.

17 Q. Are you aware of any manufacturer that did  
18 not follow that custom and practice in the 1970s?

19 MR. ROBINSON: Object to the form of that  
20 question.

21 THE WITNESS: I am not aware of any that  
22 didn't -- I am not aware of any that mandated the  
23 use of a front -- a front covering on a foot  
24 control of a press brake of this type.

1 BY MR. HARTMAN:

2 Q. What do you mean of this type? What type  
3 is this?

4 A. Well, I mean there are press brake that  
5 are bigger or smaller, do different things of one  
6 that would be competitive with this product, the  
7 same approximate size, configuration, those kinds  
8 of things.

9 Q. Are you saying that size of the press  
10 brake might make a difference in the type of foot  
11 control utilized with the press brake?

12 A. No, what I am saying is in my evaluation  
13 of this, I am really looking at things that are  
14 kind of in the same arena.

15 I am not looking at a press brake that  
16 might be used in some shipyard where they are  
17 trying to press a piece of iron that's 80 feet or a  
18 hundred feet long. I didn't look at those.

19 I don't know what they use. But they probably have  
20 multiple workers and they may have those foot  
21 controls all in series so that no one person can  
22 activate it. I am looking at a press brake that's  
23 like this one for comparison purposes.

24 Q. Would a press brake like this one be a

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1 single operator press brake; would that be a fair  
2 definition?

3 MR. ROBINSON: I will object to the form of the  
4 question.

5 THE WITNESS: Well, I don't know that I would  
6 characterize it as a single operator. If you look  
7 at the specification for this, it has a speed. It  
8 has capacity. It has a stroke. It has a shunt  
9 height. It has a dye area, a certain width, a  
10 certain depth, those kinds of things.

11 BY MR. HARTMAN:

12 Q. Is it your testimony today, and I need to  
13 know, that different specifications of the items  
14 you just enumerated may mandate a different type of  
15 foot control?

16 A. No, I didn't say that at all. You asked  
17 me if the custom and practice, how did I come up  
18 with the custom and practice is what I thought you  
19 had said. And I said I looked at the codes and  
20 standards, the regulations, the documents written  
21 about it and other manufacturers.

22 I didn't try to find every manufacturer in  
23 the world at every point in time. But the ones  
24 I did look at that I am using for a basis of

1 comparison are ones that are about the same size.

2 Q. Who would that be?

3 A. They would be those -- some of them are in  
4 the documents that I have provided you here. There  
5 is, I think, Wysong. I have a brochure from them.  
6 I think I have a brochure from Cincinnati. There  
7 are other brochures of other manufacturers in here  
8 of press brakes.

9 Q. So you would be looking at what other  
10 manufacturers did in the 1970s to determine custom  
11 and practice as one of your elements for custom and  
12 practice?

13 A. Not only 1970s but other periods of time  
14 and currently. And I would expect that if  
15 currently that is not mandated, that it wouldn't  
16 have been mandated in the '90s, '80s or '70s.

17 And I also am not looking at just the  
18 custom and practice based on what people did but  
19 I looked at the custom and practice based on the  
20 codes and standards. That's why I have got the  
21 1970-something version of this ANSI standard, the  
22 '80s-something version and the 2002 version, to  
23 show there has been a consistency in the standards  
24 over time in that regard also.

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1 Q. But you referred to the standards. Then  
2 you also -- and you also indicated a separate  
3 element that you referred to is the customs and  
4 practices?

5 A. No, I referred to custom and practice  
6 which includes codes, standards, regulations,  
7 literature, what you see people doing then, between  
8 then and now and what you see them doing now. All  
9 of that collaborates to make a custom and practice.

10 And I don't think the custom and practice  
11 for press brakes have already changed from the mid  
12 '70s to today with regard to the use of a foot  
13 pedal of this general configuration without a front  
14 door on it.

15 Q. Has it changed with regard to the use of  
16 gated foot controls?

17 A. That's what I am talking about, a gate on  
18 the front or a door on the front or something like  
19 that. You can go to the OSHA website right now and  
20 see that they talk about press brakes and they show  
21 a foot pedal -- it is in my report -- without a  
22 door on the front, without a gate on the front.  
23 And that's what they are saying, this is fine, this  
24 is a good example.

1 Q. Would you agree, though, that OSHA applies  
2 to the employer?

3 A. OSHA can only fine and cite employers.  
4 They can sometimes incite -- cite secondary and  
5 third level employers. So -- but they don't have  
6 the right or authority to cite a manufacturer who  
7 manufactures something that's brought into your  
8 employment place.

9 Q. So OSHA can't mandate what Heim should do  
10 with regard to the type of foot control it includes  
11 with its press brake; am I correct?

12 MR. ROBINSON: I will object to the form of the  
13 question.

14 THE WITNESS: They can't do it through any kind  
15 of citation but effectively they have some  
16 influence because if Heim made a press brake that  
17 was in conflict with OSHA standards, OSHA in their  
18 activities would give so many citations and it  
19 would be precluded from being used, that they would  
20 lose market share and would not be able to sell  
21 that product. The word would get around that a  
22 Heim press with this configuration doesn't comply  
23 with OSHA standards, don't buy it. So they do have  
24 a bully pulpit in that regard but they can't give

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1       them a citation.

2           Q.    So OSHA cannot cite Heim for making a  
3       defective product that it ships to Cory?

4           A.    That's correct. And it is not a defective  
5       product.

6           Q.    I am not asking for your opinion as to  
7       whether its defective. I am saying if Heim sent a  
8       defective product to Cory, OSHA is not going to  
9       cite Heim for the defective product?

10          A.    No, they would have cited Cory; and in  
11       this case they cited Cory but not for a defective  
12       product in regards to the foot switch. They cited  
13       Cory for not having the appropriate safeguarding in  
14       forms of point-of-operation safeguarding for the  
15       operator.

16          Q.    I understand.

17          A.    I am glad.

18          Q.    OSHA was silent as to Heim's culpability  
19       in this matter; am I correct?

20          MR. ROBINSON: Objection to the form.

21          THE WITNESS: OSHA had no criticism of the foot  
22       pedal, whether it had a front closure on it or not.  
23       They were critical of the lack of  
24       point-of-operation safeguarding which is what's

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1 mandated by OSHA. It is what's mandated by ANSI.  
2 It is what the custom and practice is for  
3 safeguarding the point of operation.

4 BY MR. HARTMAN:

5 Q. OSHA was silent in its report as to  
6 whether or not Heim supplied a defective foot  
7 control with its machine; am I correct?

8 MR. ROBINSON: I object to the form of the  
9 question.

10 THE WITNESS: I guess --

11 MR. ROBINSON: Also asked and answered.

12 THE WITNESS: Taken in context of what  
13 I said, I guess.

14 BY MR. HARTMAN:

15 Q. Is it reasonably foreseeable that  
16 operators of press brakes would place their hands  
17 in the dye area?

18 MR. ROBINSON: Objection to the form.

19 THE WITNESS: It is foreseeable that under  
20 certain circumstances operators will put their  
21 hands in the dye areas with the proviso that it is  
22 recommended by OSHA, by ANSI and other safety  
23 organizations that that not be done. And it is  
24 recommended and required by OSHA and ANSI that

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1 point-of-operation safeguarding be applied to those  
2 pieces of equipment. And in some very unusual  
3 circumstances it is supervisory or administrative  
4 controls be provided to prevent people from being  
5 injured if and when they choose to do that.

6 BY MR. HARTMAN:

7 Q. I understand but it is reasonably  
8 foreseeable that individuals would place their hand  
9 in the dye area of a press brake?

10 MR. ROBINSON: Objection to the form, asked and  
11 answered.

12 THE WITNESS: I have answered it with an  
13 explanation because it would be misleading just to  
14 say yes or no on that.

15 BY MR. HARTMAN:

16 Q. What is a supervisory safeguard? You  
17 indicate in your explanation that you use the term  
18 supervisory safeguard.

19 A. Sure, your expert hasn't explained that to  
20 you? I am surprised it hasn't come up.

21 Q. Well, sir, your caveat on that is not the  
22 purpose of this deposition. The purpose of this  
23 deposition is to understand what you know and how  
24 you explain it because different people in the

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1 course of events can cite things in a different  
2 way; am I correct?

3 A. Sure.

4 Q. So my concern is today to know what you  
5 consider supervisory protection or controls as you  
6 have just utilized them in your explanation.

7 A. There are allowances in codes and  
8 standards and from OSHA for press brakes. There  
9 are certain procedures, certain functions that can  
10 be performed on a press brake and for that matter  
11 to some extent could also be performed on a  
12 mechanical power press where it is very difficult  
13 and financially impractical to put a  
14 point-of-operation safeguard.

15 Under those circumstances you can have  
16 supervisory or administrative controls where people  
17 have special training, special supervision, you  
18 limit the amount of pieces that are made, you take  
19 special precautions, you go slow with production,  
20 those kinds of things. And those are typically  
21 called administrative or supervisory safeguarding  
22 methods.

23 Q. Do you know what a supervisory switch is?

24 A. I am assuming you are talking about the

1 switch on this machine that allows a key to put it  
2 from the jog, foot and hand control and off  
3 positions.

4 Q. Yes.

5 A. But different people have different  
6 meanings for it.

7 Q. What do you call that switch?

8 A. It is really a selector switch that's  
9 operated with a key.

10 Q. Do you have an opinion today as to who  
11 makes the selection in the typical plant as to  
12 utilizing the selector switch for the modes of  
13 operation?

14 MR. ROBINSON: Object to the form.

15 THE WITNESS: Typically, we are talking about  
16 typical, general, and there are specific variations  
17 from this, the person who sets up the machine is  
18 familiar with the dyes, is familiar with the  
19 process, the procedures that are going to be  
20 performed, familiar with the person who is doing  
21 the task and their training makes that choice. So  
22 they typically set it to whether in this case it  
23 should be two hand controls or foot control or off  
24 and take the key away.

1           There are some circumstances where that  
2       responsibility is also the responsibility of the  
3       person who might be running the machine.

4       BY MR. HARTMAN:

5           Q.    What circumstances would it be the  
6       responsibility of the person who might be running  
7       the machine?

8           A.    You see a lot of times for small run  
9       productions where there cannot be  
10      point-of-operation safeguarding that a senior  
11      person who might actually be like a floor foreman  
12      who normally sets up the machine for someone else  
13      and then walks away, that they set it up for  
14      themselves, have the key and make the selection and  
15      they leave the key in the machine while they are  
16      doing the short run production or put it in their  
17      pocket while they are doing it. But they are  
18      actually making the selection and running the  
19      machinery. And likewise maintenance and repair  
20      people might have that same capability.

21          Q.    On page 12 --

22          A.    Sure.

23          Q.    -- under warnings and manual?

24          A.    Yes.

1 Q. Item No. 3, the second section of numbered  
2 items, it says the operator must read and  
3 understand the manual.

4 A. Yes.

5 Q. Is it your testimony today that an  
6 operator must read the entire manual and understand  
7 it?

8 A. I think at a minimum they should read and  
9 must read the safety admonitions in the manual and  
10 those features and functions that they are going to  
11 be working with. So if there is something in the  
12 manual about how the on-off switch works, if there  
13 is something about an emergency stop that they  
14 would have to know about, if there is something  
15 about how to make a normal adjustment that an  
16 operator might make, then I think they need to read  
17 it and understand it.

18 If there is a section in the manual about  
19 how to do some special service, some engineering  
20 calculation, how to evaluate the performance or  
21 economic performance or wear or those kinds of  
22 things, I don't expect that they should necessarily  
23 read it with an eye to understanding it. Certainly  
24 they can read it.

1 But definitely you would expect, and  
2 I think it would be reasonable to expect, that if  
3 you give someone a manual for a piece of equipment,  
4 that they are going to try to read and try to  
5 understand and follow all of the safety admonitions  
6 and the functional things that they have to deal  
7 with.

8 Q. What if they have received on-the-job  
9 training without the manual, would you expect them  
10 to still read the manual and understand it?

11 A. I have seen situations where the  
12 on-the-job training has been so good that reading  
13 the manual is just a repeat of it. But I think on  
14 a machine like this, reading the manual, at least  
15 the safety admonitions are so easy, so simple, so  
16 direct, that I would still recommend that the  
17 operator occasionally -- read it to begin with and  
18 then occasionally throughout their career reread  
19 those sections.

20 Q. Item No. 7 you say that the operation of  
21 the foot control is guarded over the top and should  
22 be positioned to a safe position.

23 A. Location.

24 Q. Location, I apologize. Let me read that

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1 again.

2 Item No. 7, you say that the operation of  
3 the foot control is guarded over the top and should  
4 be positioned to a safe location.

5 A. Yes.

6 Q. Do you find fault with the location of the  
7 foot control as it has been described to you with  
8 Ms. Lindquist's injury on the day of the accident?

9 A. Yes and no.

10 Had there been point of operation  
11 safeguarding as there was supposed to be, then  
12 the -- and it was performing the way it should,  
13 most likely the way she was sitting, the way she  
14 was doing things and the location of the foot  
15 control, as best I can understand it, would be  
16 fine.

17 There is some concern about foot controls  
18 that are too close to machines and that someone can  
19 hit the foot control and before the machine can  
20 completely cycle, they move their hand or other  
21 body part into a point of operation and get injured  
22 by that.

23 So there are some circumstances where the  
24 location of the foot control is more important and

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1 in more recent standards you see the recommendation  
2 or requirement that foot controls be anchored in a  
3 specific location depending on what's being  
4 processed and how the dyes are being used and how  
5 big or the shape of the piece part.

6 But for this particular accident where it  
7 is small and the way the accident occurred, I don't  
8 have a problem with the foot pedal or foot control  
9 being where it was described.

10 Q. I refer you to page 13 of your report,  
11 please.

12 A. Sure.

13 Q. Paragraph 2.

14 A. The one that starts out one?

15 Q. Yes. It says, one of the other safety  
16 concepts used in offering add-on safety features is  
17 that the application of an add-on safeguard itself  
18 should not cause a new or aggravated hazard. The  
19 application of a front cover to a foot control for  
20 this type of equipment causes a new or aggravated  
21 hazard, that of riding the foot control.

22 Did I correctly read your report?

23 A. Yes, I think so.

24 Q. And is that your testimony today?

1 A. Yes.

2 Q. And the new or aggravated hazard caused by  
3 adding a front gate would be the riding of the foot  
4 control?

5 A. That's correct, at least that's one of  
6 them. That's the major one.

7 Q. Is there another one?

8 A. Well, and I think I mentioned this later  
9 on, the fact that even with the front door on a  
10 device like this, whatever you want to call it, a  
11 gate -- and this is like the dependency, I think  
12 that's in the section I talk about it -- people  
13 start depending on it and they say I don't have to  
14 care where my foot -- how close it comes or if I am  
15 playing around with the foot pedal, it has got a  
16 door on the front but that door, a couple of things  
17 could happen, it could stick in the open position  
18 or as Ralph Barnett has testified, if you hit it  
19 the right way with the right force, it will pop  
20 open and your foot will go in anyway or whatever is  
21 hitting it will go in anyway. So those are  
22 additional hazards. But the one that's talked  
23 mostly about in the literature is the riding of it.

24 Q. Do you agree with the concept of the

1 dependency hypothesis?

2 MR. ROBINSON: Object to the form of the  
3 question.

4 THE WITNESS: I think in certain contexts, yes.  
5 The fact that people depend on things isn't always  
6 bad but under certain circumstances and certain  
7 designs that people start to depend on things  
8 especially for functionality that it wasn't  
9 anticipated for, then you run into a problem.

10 So when people know, for example, that a cable  
11 can support a hundred pounds but they also know  
12 that it really can probably support 300 before it  
13 fails and if people start changing their behavior  
14 and are depending on this additional capacity, that  
15 can cause problems. So it is bad to depend on  
16 that.

17 I have brakes on my car and I know they will  
18 stop a car in a certain distance and there is  
19 nothing bad with me depending on them doing that.  
20 So, you know, it has a place. The dependency  
21 hypothesis or that concept has a place.

22 BY MR. HARTMAN:

23 Q. How do you apply the dependency hypothesis  
24 to a front gate on a foot control?

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1           A. Well, as I mentioned, you know, we have  
2 got two different things. We have got this safety  
3 device should not cause its own new hazard or  
4 aggravate a hazard but we have this dependency  
5 hypothesis and I gave you two examples.

6           If people start depending on the front  
7 door and they say, I think my foot can't get in  
8 there because it has a front door on it, then there  
9 is no reason for them to keep track of where the  
10 foot pedal is, keep track of where their foot is  
11 with regard to it. They might actually decide they  
12 want to kick the foot pedal because they are mad  
13 thinking that this front door is going to protect  
14 them.

15           The day that that front door stays in the  
16 up position, it gets stuck, jams up there for one  
17 reason or another or the day they kick it -- and  
18 Ralph Barnett has identified this and I talked  
19 about it too -- if you kick it the right way, it  
20 will open. And you're depending on it not opening  
21 and providing its protection and it fails in either  
22 of those two ways, you have a situation where the  
23 dependency hypothesis would say this causes another  
24 accident scenario.

1 Q. Your quote is recently completed research  
2 has confirmed that some press manufacturers -- what  
3 some press manufacturers hypothesized, the mouse  
4 trap front cover design is unsafe for most punch  
5 press operations since it encourages the practice  
6 of riding the pedal. And then you footnote  
7 Philosophical Aspects of Dangerous Safety Systems;  
8 is that correct?

9 A. Yes.

10 Q. Is that what you intend on testifying to  
11 in this matter?

12 A. Yes.

13 Q. Do you hold true to that statement today?

14 A. It is just a quote. I believe I quoted it  
15 properly. I guess it could be there could be a  
16 typo in there. But other than that I believe  
17 I quoted it properly and I believe that's the  
18 correct reference.

19 Q. Do you agree with that statement?

20 MR. ROBINSON: Let me object to the form of the  
21 question.

22 THE WITNESS: I agree -- I don't know that it  
23 confirms what press manufacturers have hypothesized  
24 but I agree with the concept that adding a front

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1 door or gate to a foot control encourages the  
2 practice of riding the pedal.

3 BY MR. HARTMAN:

4 Q. Do you consider the Philosophical Aspects  
5 of Dangerous Safety Systems written by Professor  
6 Barnett and Hamilton to be authoritative?

7 MR. ROBINSON: Object to the form.

8 THE WITNESS: You know, I would have to go back  
9 and look at the entire document to answer that  
10 properly. I only quoted this particular section.  
11 As I said before, I don't look to a stand-alone  
12 item typically as authoritative unless there is  
13 only one item and you are stuck with that. I try  
14 to find second and third and fourth, fifth level  
15 sources.

16 I believe this concept that putting a door or a  
17 gate on the front of a foot control encourages  
18 riding the pedal has been substantiated by a  
19 variety of people. And I think that concept, the  
20 concept I believe and I think it is an  
21 authoritative kind of concept now.

22 BY MR. HARTMAN:

23 Q. Did you rely upon the Philosophical  
24 Aspects of Dangerous Safety Systems to Formulate

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1 your opinions in this case?

2 A. No.

3 Q. Did you consult the Philosophical Aspects  
4 of Dangerous Safety Systems to formulate your  
5 opinions in this case?

6 A. I only consulted that to point out the  
7 inconsistency in Ralph Barnett's testimony in  
8 regards to his pre law -- this lawsuit publications  
9 where he is acknowledging the fact that people tend  
10 to ride the pedal when there is a door on the front  
11 and his, in the course of this case, willingness  
12 now to reject that as a hazard, as a danger and as  
13 a downside. So I only consulted this and the other  
14 safety briefs to show the inconsistency between his  
15 written testimony -- written statements and his  
16 testimony in this case whether it is in the report  
17 or in his deposition.

18 Q. Do you have any other written statements  
19 or depositions or transcripts of testimony that  
20 support your position that Professor Barnett is  
21 testifying inconsistently in this case?

22 MR. ROBINSON: Object to the form.

23 THE WITNESS: Well, he only gave one deposition  
24 in this case. How could I have multiple

1 depositions of him in this case? He only gave one.  
2 If he gave two, there might be more inconsistencies  
3 in this case. Are you asking from other cases?

4 BY MR. HARTMAN:

5 Q. Yes.

6 A. Okay. That wasn't your question though.  
7 You said in this case.

8 I don't have copies of his depositions  
9 from other cases. He keeps those guarded fairly  
10 closely, and I don't have access to them.

11 Q. My question, sir, I believe if the court  
12 reporter would like to read it back but I will  
13 repeat it so that you understand it is, do you have  
14 any other written statements, reports or  
15 depositions that support your position that  
16 Professor Barnett is testifying inconsistently in  
17 this case?

18 MR. ROBINSON: Object to the form of the  
19 question.

20 THE WITNESS: No, the only documents I have  
21 that I am using for that purpose are the things  
22 that he has published in the open media, whether  
23 they are safety briefs or other publications that  
24 he may have published with ASME or National Safety

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1 Council or things like that.

2 I do not have copies of his depositions. I do  
3 not have copies of his reports, and I do not have  
4 copies of his notes from other cases.

5 BY MR. HARTMAN:

6 Q. Have you identified any of his prior  
7 depositions, his prior reports or his notes to  
8 Mr. Robinson for him to consult to make a  
9 determination that Professor -- to consult to allow  
10 Mr. Robinson to make a determination as to whether  
11 or not Professor Barnett is testifying  
12 inconsistently in this case?

13 MR. ROBINSON: Objection to form.

14 THE WITNESS: I guess what you are asking me is  
15 have I given Mr. Robinson the names of cases that  
16 he could check to see if there are depositions  
17 where there are inconsistencies?

18 BY MR. HARTMAN:

19 Q. Yes.

20 A. No, I have not.

21 Q. Have you given him the name of cases or  
22 clients where you might find -- where Mr. Robinson  
23 might find reports?

24 A. I don't know if I did or didn't but

1 I wouldn't be surprised that I may have mentioned  
2 that Triodyne in the form of Ralph Barnett  
3 testified on behalf of Linemaster and I believe  
4 maybe Square D in regards to their manufacture of  
5 foot controls and other controls, that he has  
6 testified for various press, mechanical, hydraulic  
7 press manufacturers and press brake manufacturers  
8 defending them concerning issues such as the  
9 manufacturer cannot provide a point-of-operation  
10 safeguarding but that it should be there.

11 And he may have, but I am not certain, may  
12 have testified about the combination of that  
13 equipment and press brakes but I don't know the  
14 names of any of those cases. I don't have the  
15 notes from those cases, and I don't have his  
16 reports.

17 Q. Do you know where any of that information  
18 is located?

19 MR. ROBINSON: Object to the form.

20 THE WITNESS: When I used to work at Triodyne,  
21 there used to be archives of past closed cases that  
22 Triodyne kept in their possession. And I believe  
23 in many of those situations there may have been  
24 copies of photographs, videotapes and reports and